Commonwealth of Kentucky Environmental and Public Protection Cabinet Department for Environmental Protection Division for Air Quality 200 Fair Oaks Lane, First Floor Frankfort, Kentucky 40601 (502) 564-3999

Final

AIR QUALITY PERMIT Issued under 401 KAR 52:030

Permittee Name: Kentucky Solite Corporation

Mailing Address: PO Box 39

Brooks, KY 40109

Source Name: Kentucky Solite Corporation

Mailing Address: PO Box 39

Brooks, KY 40109

Source Location: 1797 Coral Ridge Road

Brooks, KY 40109

Permit: V-05-079 R1

Agency Interest: 454

Activity: APE20080001

Review Type: Title V Operating/Construction

Source ID: 21-029-00002

Regional Office: Frankfort Regional Office

643 Teton Trail, Suite B Frankfort, KY 40601-1758

(502)564-3358

County: Bullitt

Application

Complete Date: August 7, 2008
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John S. Lyons, Director Division for Air Quality

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	Permit type	Log or Activity#	Complete Date	Issuance Date	Summary of Action
O-76-26	Initial Operating	3716	03/12/1976	03/31/1976	Original Operating Permit for 3 Kilns
C-84-63	Construction	7592	03/19/1984	06/28/1984	Permit adding Wet Scrubber to Kiln 3
O-85-56	Operating	8116	03/18/1985	03/27/1985	Operating permit to burn Liquid Burnable Material in Kiln 3
O-85-56 Rev. 1	Operating	9082	07/20/1987	09/20/1987	Revision adding Kiln 2 back on permit
C-89-170	Construction	A477	07/18/1989	09/26/1989	Permit adding crusher and conveyor
C-93-21	Construction	C102	11/24/1992	01/29/1993	Permit adding equipment to burn Hazardous Waste
S-94-101	Construction and Operating	D014	05/23/1994	08/03/1994	Permit adding Dust silo, controls, conveys
O-85-56 Rev. 2	Operating	D679	03/03/1995	05/03/1995	Permit restoring Kiln 2 & Kiln 3 Feed Rates
V-05-079	Initial Issuance	APE20050002	03/08/2006	11/27/2006	Initial Title V Draft Permit
V-05-079 R1	Minor Modification	APE20080001	08/13/08	10/8/2008	Title V Minor Modification

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SECTION A - PERMIT AUTHORIZATION

Pursuant to a duly submitted application the Kentucky Division for Air Quality hereby authorizes the operation of the equipment described herein in accordance with the terms and conditions of this permit. This permit has been issued under the provisions of Kentucky Revised Statutes Chapter 224 and regulations promulgated pursuant thereto.

The permittee shall not construct, reconstruct, or modify any affected facilities without first submitting a complete application and receiving a permit for the planned activity from the permitting authority, except as provided in this permit or in 401 KAR 52:020, Title V Permits.

Issuance of this permit does not relieve the permittee from the responsibility of obtaining any other permits, licenses, or approvals required by this Cabinet or any other federal, state, or local agency.

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SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS

Emission Unit 02 Lightweight Aggregate Rotary Kiln

Description:

Kiln #2, Allis Chalmers Counter Current Rotary Kiln, 125 feet long, 8 feet inside Diameter

11 ton/hour Maximum Rated Raw Material Feed Input Capacity

35 mmBtu/hour Maximum Rated Heat Input Capacity

Raw Material: Shale, Clay, Slate, and/or Recycled Particulate Matter

Primary Fuel: Coal

Secondary Fuels: Natural Gas, Fuel oil, and both On-Specification and Off-Specification Used

Oil as defined in 40 CFR 279 and listed in this permit

Construction commenced: 1955

Control Equipment:

Primary: (PP2A) Wet Scrubber, reconstructed 1987

Alternate: (PP2) Baghouse with optional Lime injection, constructed 1987 & 1992; or,

(PP1) Baghouse with optional Lime injection, constructed 1993; or,

(PP1A) Wet Scrubber, reconstructed 1984

APPLICABLE REGULATIONS:

401 KAR 61:020, Existing Process Operations that commenced before July 2, 1975.

40 CFR 279 subpart G, Standards for Used Oil Burners who burn Off-specification Used Oil for Energy Recovery.

40 CFR 761, Polychlorinated Biphenyls (PCBs) Manufacturing, Processing, Distribution in Commerce, and Use Prohibitions.

1. Operating Limitations:

- a. While burning coal, the fuel feed rate shall not exceed 1.42 tons per hour and the process weight shall not exceed 24,840 pounds per hour.
- b. While burning natural gas, fuel oil, or used oil, the process weight rate shall not exceed 22,000 pounds per hour.

2. Emission Limitations:

a. Pursuant to 401 KAR 61:020, Section 3(2)(a), particulate emissions for Kiln #2 shall not exceed 22.2 pounds per hour based on a three hour average and 97.2 tons/year.

The permittee may assure compliance with the particulate emission standard for Kiln #2 using the following equation:

Particulate Emissions (lb/hr) = [(Raw Material Feed in tons/hr multiplied by 130 (AP-42 Factor)) plus (Coal Feed in tons/hr multiplied by Ash Content multiplied by 10 (AP-42))] multiplied by (1 minus control efficiency). The permittee may use a control efficiency of 99.4 percent while using the wet scrubber emission points (PP2A) or (PP1A) and 99.9 percent while using the bag house emission points (PP2) or (PP1).

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SECTION B -EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Emission Limitations: (continued)

- b. Pursuant to 401 KAR 61:020, Section 3(1)(a), the permittee shall not cause, suffer, allow, or permit any continuous emissions into the open air from a control device or stack which is equal to or greater than forty (40) percent opacity based on six-minute averages.
- c. Pursuant to 401 KAR 50:012, Section 1(2), sulfur content of number 2 fuel oil or used oil burned shall not exceed 1.5 percent by weight; and, coal sulfur content received and burned shall not exceed 2.5 lbs/mmBtu gross heat content, shall not exceed 1.9 lbs/mmBtu gross heat content in any three month rolling average, and shall not exceed 1.7 lbs/mmBtu gross heat content in any twelve month rolling average.

The permittee may assure compliance with these sulfur content limitations by using approved EPA or ASTM test methods or vendor certified fuel analysis to determine the fuel sulfur content, and by calculating both a three-month rolling average and a twelve-month rolling average from the as- received fuel records and fuel analysis.

d. Pursuant to 40 CFR 279 and 40 CFR 761.20, On-Specification (On-Spec) Used Oil shall not exceed the allowable levels below:

On-Spec Used Oil Specifications

Constituent/Property Allowable Level Arsenic 5 ppm maximum 2 ppm maximum Cadmium Chromium 10 ppm maximum 100 ppm maximum Lead 4,000 ppm maximum **Total Halogens** 100 °F minimum Flash Point **PCBs** less than 2 ppm

e. Pursuant to 401 KAR 50: 012, Section 1 (2), and 40 CFR 761.20, Off-Specification (Off-Spec) Used Oil shall not exceed the allowable levels below:

Off-Spec Used Oil Specifications

Constituent/Property Allowable Level Arsenic 5 ppm maximum Cadmium 2 ppm maximum 10 ppm maximum Chromium 100 ppm maximum Lead less than 10,000 ppm **Total Halogens** 100 °F minimum Flash Point **PCBs** less than 50 ppm

f. The permittee shall demonstrate compliance with each of the above Used Oil Specifications by using approved EPA or ASTM test methods or a certified used oil analysis pursuant to 40 CFR 279 and 40 CFR 761.20. Used oil containing 1,000 ppm or more total halogens is presumed to be a hazardous waste which may be rebutted by the permittee pursuant to 40 CFR 279.10 (b) (1).

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SECTION B -EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

3. <u>Testing Requirements:</u>

- a. The permittee shall perform at least one performance test on Kiln #2 for particulate emissions during the life of this permit to demonstrate compliance with the particulate standard. This test shall be scheduled within two years after issuance of the final permit and not later than six months after Kiln #2 has been operated for any amount of hours on four consecutive days.
- b. The Kiln #2 performance test for particulates shall be conducted while operating the primary control device, wet scrubber (PP2A), unless a variance is requested of and granted by the Division.
- c. While conducting performance tests to demonstrate compliance with the particulate standards, for each test run, the permittee shall record representative operational data of the control equipment and read the visible emissions, weather permitting, using U.S. EPA Reference Method 9.
- d. The permittee shall conduct a performance test for particulate and sulfur dioxide emissions when combusting fuel oil or used oil if such usage exceeds 60 days within any consecutive twelve-month period.

4. **Specific Monitoring Requirements:**

- a. The permittee shall monitor the amount and type of fuel combusted and the amount of raw material feed on an hourly basis.
- b. The permittee shall perform a qualitative visual observation of the opacity of emissions from the Kiln 2 control device in operation on a daily basis and maintain a log of the observations. If visible emissions are seen, excluding the wet scrubber vapor portion of the plume, the permittee shall initiate an inspection of the unit and if necessary, make repairs or adjustments to the emission control process.
- c. At a minimum of once per month, while Kiln 2 is in operation, USEPA Reference Method 9 observations shall be performed on the control device in operation. These observations may include a minimum of one set of six-minute average data.
- d. The permittee shall monitor water flow rates, and differential pressure across wet scrubbers PP2A and PP1A at least once daily when in operation.
- e. The permittee shall monitor the sulfur content of each shipment of fuel oil and used oil and the sulfur and heat content of each shipment of coal received. The permittee may use approved EPA or ASTM test methods or fuel supplier certifications to meet this requirement.

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SECTION B -EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

5. **Specific Recordkeeping Requirements:**

- a. The permittee shall maintain the records of the amount and type of fuel combusted and the amount of raw material feed on an hourly basis.
- b. Records regarding all Reference Method 9 observations, inspections, maintenance, and operation of the control equipment shall be maintained.
- c. The permittee shall maintain a log of the sulfur content of each shipment of fuel oil and used oil and the sulfur and heat content of each shipment of coal used as fuel. The permittee may use approved EPA or ASTM test methods or fuel supplier certifications to meet this requirement.
- d. The permittee shall maintain onsite records and documents for all Used Oil usage and standards pursuant to 40 CFR 279 and 40 CFR 761.

Specific Reporting Requirements:

See Section F, Conditions 5, 6, 7, 8, and 9.

7. Specific Control Equipment Operating Conditions:

- a. All pollution control equipment shall be operated as necessary to maintain compliance with the permitted emission limitations, in accordance with the manufacturer's specifications and/or good engineering practices.
- b. Records for Kiln #2 control equipment regarding the hours of operation, type used, and maintenance shall be maintained.
- c. See Section E for further requirements.

8. <u>Alternate Operating Scenarios:</u>

- a. The permittee may operate, under normal conditions, using any of the alternative control devices listed above with no allowance for variance from all of the emission limitations contained within this permit.
- b. The permittee shall not use the same control device to control emissions while simultaneously operating Kiln 2 and Kiln 3 except during a unit malfunction, and then, only long enough to safely shutdown the malfunctioning unit or safely startup an alternative control device.

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SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Emission Unit 03 Lightweight Aggregate Rotary Kiln

Description:

Kiln #3, Allis Chalmers Counter Current Rotary Kiln, 175 feet long, 11 feet inside Diameter 37 ton/hour Maximum Rated Raw Material Feed Input Capacity

105 mmBtu/hour Maximum Rated Heat Input Capacity

Raw Material: Shale, Clay, Slate, and/or Recycled Particulate Matter

Primary Fuel: Coal

Secondary Fuels: Natural Gas, Fuel oil, and both On-Specification and Off-Specification Used Oil as defined in 40 CFR 279

Construction commenced: 1962

Control Equipment:

Primary: (PP1A) Wet Scrubber, reconstructed 1984

Alternate: (PP1) Baghouse with optional Lime injection, constructed 1993; or,

(PP2) Baghouse with optional Lime injection, constructed 1987 & 1992; or,

(PP2A) Wet Scrubber, reconstructed 1987

APPLICABLE REGULATIONS:

401 KAR 61:020, Existing Process Operations that commenced before July 2, 1975.

40 CFR 279 subpart G, Standards for Used Oil Burners who burn Off-specification Used Oil for Energy Recovery.

40 CFR 761, Polychlorinated Biphenyls (PCBs) Manufacturing, Processing, Distribution in Commerce, and Use Prohibitions.

1. **Operating Limitations:**

- a. While burning coal, the fuel feed rate shall not exceed 4.27 tons per hour and the process weight rate shall not exceed 84,540 pounds per hour.
- b. While burning natural gas, fuel oil, or used oil, the process weight rate shall not exceed 66,000 pounds per hour.

2. <u>Emission Limitations</u>:

a. Pursuant to 401 KAR 61:020, Section 3(2)(a), particulate emissions for Kiln #3 shall not exceed 41.9 pounds per hour based on a three hour average and 184.5 tons/year.

The permittee may assure compliance with the particulate emission standard for Kiln #3 using the following equation:

Particulate Emissions (lb/hr) = [(Raw Material Feed in tons/hr multiplied by 130 (AP-42 Factor)) plus (Coal Feed in tons/hr multiplied by Ash Content multiplied by 10 (AP-42))] multiplied by (1 minus control efficiency). The permittee may use a control efficiency of 99.4 percent while using the wet scrubber emission points (PP1A) or (PP2A) and 99.9 percent while using the bag house emission points (PP1) or (PP2).

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SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Emission Limitations (continued):

- b. Pursuant to 401 KAR 61:020, Section 3(1)(a), the permittee shall not cause, suffer, allow, or permit any continuous emissions in to the open air from a control device or stack which is equal to or greater than forty (40) percent opacity based on six-minute averages.
- c. Pursuant to 401 KAR 50:012, Section 1(2), sulfur content of number 2 fuel oil or used oil burned shall not exceed 1.5 percent by weight; and, coal sulfur content received and burned shall not exceed 2.5 lbs/mmBtu gross heat content, shall not exceed 1.9 lbs/mmBtu gross heat content in any three month rolling average, and shall not exceed 1.7 lbs/mmBtu gross heat content in any twelve month rolling average.

The permittee may assure compliance with these sulfur content limitations by using approved EPA or ASTM test methods or vendor certified fuel analysis to determine the fuel sulfur content, and by calculating both a three-month rolling average and a twelve-month rolling average from the as- received fuel records and fuel analysis.

d. Pursuant to 40 CFR 279 and 40 CFR 761.20, On-Specification (On-Spec) Used Oil shall not exceed the allowable levels below:

On-Spec Used Oil Specifications

Constituent/Property Allowable Level Arsenic 5 ppm maximum 2 ppm maximum Cadmium Chromium 10 ppm maximum 100 ppm maximum Lead 4,000 ppm maximum **Total Halogens** 100 °F minimum Flash Point **PCBs** less than 2 ppm

e. Pursuant to 401 KAR 50: 012, Section 1 (2), and 40 CFR 761.20, Off-Specification (Off-Spec) Used Oil shall not exceed the allowable levels below:

Off-Spec Used Oil Specifications

Constituent/Property Allowable Level Arsenic 5 ppm maximum Cadmium 2 ppm maximum 10 ppm maximum Chromium 100 ppm maximum Lead less than 10,000 ppm **Total Halogens** 100 °F minimum Flash Point **PCBs** less than 50 ppm

f. The permittee shall demonstrate compliance with each of the above Used Oil Specifications by using approved EPA or ASTM test methods or a certified used oil analysis pursuant to 40 CFR 279 and 40 CFR 761.20. Used oil containing 1,000 ppm or more total halogens is presumed to be a hazardous waste which may be rebutted by the permittee pursuant to 40 CFR 279.10 (b) (1).

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SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

3. <u>Testing Requirements:</u>

- a. The permittee shall perform at least one performance test on Kiln #3 for particulate emissions during the life of this permit to demonstrate compliance with the particulate standard. This test shall be scheduled within two years after issuance of the final permit.
- b. The Kiln #3 performance test for particulates shall be conducted while operating the primary control device, wet scrubber (PP1A), unless a variance is requested of and granted by the Division.
- c. While conducting performance tests to demonstrate compliance with the particulate standards, for each test run, the permittee shall record representative operational data of the control equipment and read the visible emissions, weather permitting, using U.S. EPA Reference Method 9.
- d. The permittee shall conduct a performance test for particulate and sulfur dioxide emissions when combusting fuel oil or used oil if such usage exceeds 60 days within any consecutive twelve-month period.

4. **Specific Monitoring Requirements:**

- a. The permittee shall monitor the amount and type of fuel combusted and the amount of raw material feed on an hourly basis.
- b. The permittee shall perform a qualitative visual observation of the opacity of emissions from the Kiln 3 control device in operation on a daily basis and maintain a log of the observations. If visible emissions are seen, excluding the wet scrubber vapor portion of the plume, the permittee shall initiate an inspection of the unit and if necessary, make repairs or adjustments to the emission control process.
- c. At a minimum of once per month, while Kiln 3 is in operation, USEPA Reference Method 9 observations shall be performed on the control device in operation. These observations may include a minimum of one set of six-minute average data.
- d. The permittee shall monitor water flow rates, and differential pressure across wet scrubbers PP1A and PP2A at least once daily when in operation.
- e. The permittee shall monitor the sulfur content of each shipment of fuel oil and used oil and the sulfur and heat content of each shipment of coal received. The permittee may use approved EPA or ASTM test methods or fuel supplier certifications to meet this requirement.

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SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

5. **Specific Recordkeeping Requirements:**

- a. The permittee shall maintain the records of the amount and type of fuel combusted and the amount of raw material feed on an hourly basis.
- b. Records regarding all Reference Method 9 observations, inspections, maintenance, and operation of the control equipment shall be maintained.
- c. The permittee shall maintain a log of the sulfur content of each shipment of fuel oil and used oil and the sulfur and heat content of each shipment of coal used as fuel. The permittee may use approved EPA or ASTM test methods or fuel supplier certifications to meet this requirement.
- d. The permittee shall maintain onsite records and documents for all Used Oil usage and standards pursuant to 40 CFR 279 and 40 CFR 761.

6. Specific Reporting Requirements:

See Section F, Conditions 5, 6, 7, 8, and 9.

7. **Specific Control Equipment Operating Conditions:**

- a. All pollution control equipment shall be operated as necessary to maintain compliance with the permitted emission limitations, in accordance with the manufacturer's specifications and/or good engineering practices.
- b. Records for Kiln #3 control equipment regarding the hours of operation, type used, and maintenance shall be maintained.
- c. See Section E for further requirements.

8. Alternate Operating Scenarios:

- a. The permittee may operate, under normal conditions, using any of the alternative control devices listed above with no allowance for variance from all of the emission limitations contained within this permit.
- b. The permittee shall not use the same control device to control emissions while simultaneously operating Kiln 2 and Kiln 3 except during a unit malfunction, and then, only long enough to safely shutdown the malfunctioning unit or safely startup an alternative control device.

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SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Emission Unit 04 Clinker Cooler

Description:

Kiln #3 Clinker Cooler, Fuller Grate Air Clinker Cooler 30 ton/hour Maximum Rated Finished Product Input Capacity Construction commenced: 1962

Control Equipment: (FP4) Multi-Cyclone

APPLICABLE REGULATIONS:

401 KAR 61:020, Existing Process Operations that commenced before July 2, 1975.

1. **Operating Limitations:**

None

2. <u>Emission Limitations</u>:

a. Pursuant to 401 KAR 61:020, Section 3(2)(a), particulate emissions for Kiln #3 Clinker Cooler shall not exceed 40.0 pounds per hour based on a three hour average.

The permittee may assure compliance with the particulate emission standard for Kiln #3 Clinker Cooler using the following equation:

Particulate Emissions (lb/hr) = [(Finished Product Feed in tons/hr multiplied by 0.30 (AP-42 Factor))]

b. Pursuant to 401 KAR 61:020, Section 3(1)(a), the permittee shall not cause, suffer, allow, or permit any continuous emissions in to the open air from a control device or stack which is equal to or greater than forty (40) percent opacity based on six-minute averages.

3. <u>Testing Requirements:</u>

- a. The permittee will not be required to conduct a performance test on Kiln #3 clinker cooler for particulate emissions during the life of this permit to demonstrate compliance with the particulate standard. However, the Division may request a performance test be conducted for reasons including, but not limited to multiple reported opacity limitation exceedances.
- b. While conducting performance tests to demonstrate compliance with the particulate standards, for each test run, the permittee shall record representative operational data of the control equipment and read the visible emissions, weather permitting, using U.S. EPA Reference Method 9.

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SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

4. **Specific Monitoring Requirements:**

- a. The permittee shall perform a qualitative visual observation of the opacity of emissions from the Kiln 3 clinker cooler stack on a daily basis and maintain a log of the observations. If visible emissions are seen, the permittee shall initiate an inspection of the unit and if necessary, make repairs or adjustments to the emission control process.
- b. At a minimum of once per month, while Kiln 3 Clinker Cooler is in operation, USEPA Reference Method 9 observations shall be performed on the control device in operation. These observations may include a minimum of one set of six-minute average data.

5. **Specific Recordkeeping Requirements:**

Records regarding all Reference Method 9 observations, inspections, maintenance and operation of the control equipment shall be maintained.

Specific Reporting Requirements:

See Section F, Conditions 5, 6, 7, 8, and 9.

7. Specific Control Equipment Operating Conditions:

- a. All pollution control equipment shall be operated as necessary to maintain compliance with the permitted emission limitations, in accordance with the manufacturer's specifications and/or good engineering practices.
- b. See Section E for further requirements.

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SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Emission Points of Equipment associated with Emission Units 02, 05A, 06A, 06C, 08, and 09 Subject to Fugitive Emission Standards:

Emission Unit 02 Kiln Clinker Cooler

Description:

(FP5) Kiln #2 Clinker Cooler, 70 feet by 5 feet Rotary Clinker Cooler

10 ton/hour Maximum Rated Finished Product Input Capacity

Construction commenced: 1955

Control: Water Sprays on exit conveyor (FB1)

Emission Unit 05A Raw Material Handling and Processing

Description:

(-) Truck Loadout (Feed Material from Quarry to Stockpiles #1 or #2 RS6 or Receiving Hopper RS5)

Control: Moist Material

(RS6) Raw Material Stockpile #1 (Feed Material)

Control: Moist Material

(RS6) Raw Material Stockpile #2 (Feed Material)

Control: Moist Material

(-) Front-End Loader

(Feed Stockpile #1 or #2 to Mobile Crusher MC1 or Receiving Hopper RS5)

Control: Moist Material

(RS5) Raw Material Truck Dump Receiving Hopper (Feeds Crusher RC1)

Maximum Rated Capacity: 500 ton/hour

Constructed: Pre-1975

Control: Water Sprays (Moist Material)

(RC1) Raw Material Crusher, Cedar Rapids Model 36-45 (Secondary)

(Feeds Belt Conveyor RB1)

Maximum Rated Capacity: 500 ton/hour

Constructed: Pre-1975

Control: Partial Enclosure and Water Sprays (Moist Material)

(RU1) Deister Triple Deck Vibrating Screen (Feeds Conveyors RB2, RB3, and RB4)

Maximum Rated Capacity: 500 ton/hour

Constructed: Pre-1975

Control: Roof Cover (Moist Material)

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SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Emission Unit 05A Raw Material Handling and Processing (continued)

<u>Description</u>: (continued)

(RB1) 30" Belt Conveyor and Transfer Point (from Crusher RC1 and Mobile Crusher MC1 to Screening Unit RU1)

Constructed: Pre-1975

Control: Water Sprays (Moist Material)

(RB2) 24" Belt Conveyor and Transfer Point (from Screening Unit RU1 to Crusher RC1)

Constructed: Pre-1975 Control: Moist Material

(RB3) 24" Belt Conveyor and Transfer Point (from Screening Unit RU1 to Bulk Storage Bin RS3)

Constructed: Pre-1975 Control: Moist Material

(RS3) Raw Material Fines Bulk Storage Bin (Feeds Screw Conveyor SC1 and Truck Loadout RD1)

Constructed: Pre-1975 Control: Moist Material

(RD1) Raw Material Bulk Fines Truck Loadout (From Bulk Fines Storage Bin RS3 to Quarry or Customer)

Constructed: Pre-1975 Control: Moist Material

(RB4) 24" Belt Conveyor and Transfer Point (from Screening Unit RU1 to Storage Silo RS1 or Belt Conveyor RB5)

Constructed: Pre-1975 Control: Moist Material

(RS1) Raw Material Storage Silo #1 (Feeds Conveyor PB1)

Constructed: Pre-1975 Control: Moist Material

(RB5) 24" Belt Conveyor and Transfer Point (from Conveyor RB4 to Silo RS2)

Constructed: Pre-1975 Control: Moist Material **Permit Number:** <u>V-05-079 R1</u> **Page:** <u>14 of 51</u>

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Emission Unit 05A Raw Material Handling and Processing (continued)

<u>Description</u>: (continued)

(RS2) Raw Material Storage Silo #2 (Feeds Conveyor PB2)

Constructed: Pre-1975 Control: Moist Material

(PB1) 18" Belt Conveyor and Transfer Point (from Bin RS1 to Conveyor PB3)

Constructed: Pre-1975
Control: Moist Material

(PB2) 18" Belt Conveyor and Transfer Point (from Bin RS2 to Kiln #2 or Conveyor PB4)

Constructed: Pre-1975 Control: Moist Material

(PB3) 18" Belt Conveyor and Transfer Point (from Conveyor PB1 to Kiln #2 or Conveyor PB4)

Constructed: Pre-1975 Control: Moist Material

(PB4) 18" Belt Conveyor and Transfer Point (from Conveyors PB2 or PB3 to Conveyor PB5)

Constructed: Pre-1975 Control: Moist Material

(PB5) 18" Belt Conveyor and Transfer Point (from Conveyor PB4 to Feed Bin PS3)

Constructed: Pre-1975
Control: Moist Material

(PB6) 18" Belt Conveyor and Transfer Point (from Extruder PE1 to Feed Bin PS3)

Constructed: Pre-1975 Control: Moist Material

(PS3) Kiln #3 Feed Bin (Feeds Conveyor PB7)

Constructed: Pre-1975 Control: Moist Material

(PB7) 18" Belt Conveyor and Transfer Point (from Feed Bin PS3 to Kiln #3)

Constructed: Pre-1975
Control: Moist Material

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SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Emission Unit 06A Finish Product Processing and Handling

Description:

(FB1) 18" Belt Conveyor and Transfer Point (from Coolers FP4 and FP5, MC1, or FC3 to FB2)

Constructed: Pre-1975

Control: Water Sprays (Moist Material)

(FB2) 18" Belt Conveyor and Transfer Point

(From Conveyor FB1 to Clinker Surge Pile #1)

Constructed: Pre-1975 Control: Moist Material

(-) Front-End Loader (from Cooler FP4 to Mobile Crusher MC1, Stationary Hopper FS2, or Clinker Surge Piles #1, #2, #3, #4, or #5)

Control: Moist Material

(-) Front-End Loader (from Cooler FP5 to Mobile Crusher MC1, Stationary Hopper FS2, or Clinker Surge Piles #1, #2, #3, #4, or #5)

Control: Moist Material

(-) Front-End Loader (from Clinker Surge Piles #3 or #4 to Mobile Crusher MC1, Stationary Hopper FS2, or Clinker Surge Piles #1, #2, or #5)

Control: Moist Material

(-) Front-End Loader (from Mobile Crusher MC1 to Mobile Conveyor MB3, MB4, MB5, MB6, and/or MB7 to Clinker Surge Piles #1, #2, #3, #4, or #5)

Control: Moist Material

(FS1) Clinker Surge Stockpile #1 (Clinker Surge)

Control: Moist Material (Water Spray if needed)

(FS1) Clinker Surge Stockpile #2 (Clinker Surge)

Control: Moist Material (Water Spray if needed)

(FS1) Clinker Surge Stockpile #3 (Product Material)

Control: Moist Material (Water Spray if needed)

(FS1) Clinker Surge Stockpile #4 (Product Material)

Control: Moist Material (Water Spray if needed)

(FS1) Clinker Surge Stockpile #5 (Off-spec Material)

Control: Moist Material (Water Spray if needed)

(-) Front-End Loader (from Clinker Surge Pile #1 or #2 to Mobile Hopper MS1)

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SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Emission Unit 06A Finish Product Processing and Handling (continued)

<u>Description:</u> (continued)

(FB3) 24" Belt Conveyor and Transfer Point (from Clinker Surge Pile #1 and Mobile Hopper MS1 or MS2 to Screening Unit FU1)

Constructed: Pre-1975 Control: Moist Material

(FC1) 36" Allis Chalmers Hydrocone Crusher

(From FU1, Feeds Belt Conveyor FB4)

Maximum Rated Capacity: 250 ton/hour

Constructed: Pre-1975

Control: Enclosure (Moist Material)

(FB4) 24" Belt Conveyor and Transfer Point (from Crusher FC1, Mobile Hopper MS1 or MS2, and Conveyor FB5 to Screening Units FU2 and FU3)

Constructed: Pre-1975 Control: Moist Material

(FC2) Short-head Crusher (From FU2 and FU3, Feeds Belt Conveyor FB5)

Maximum Rated Capacity: 250 ton/hour

Constructed: Pre-1975

Control: Enclosure (Moist Material)

(FB5) 20" Belt Conveyor and Transfer Point (from Crusher FC2, Mobile Hoppers MS1 or MS2 to Conveyor FB4)

Constructed: Pre-1975 Control: Moist Material

(FB6) 24" Belt Conveyor and Transfer Point (from Screening Units FU2 & FU3 to Finish Product Pile #1)

Constructed: Pre-1975 Control: Moist Material

(FB7) 20" Belt Conveyor and Transfer Point (from Screening Units FU2 & FU3 to Finish Product Pile #2)

Constructed: Pre-1975 Control: Moist Material

(FB8) 18" Belt Conveyor and Transfer Point (from Screening Units FU2 & FU3 and LAKD Filter Receiver FP1 to Finish Product Pile #3)

Constructed: Pre-1975 Control: Moist Material **Permit Number:** <u>V-05-079 R1</u> **Page:** <u>17 of 51</u>

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Emission Unit 06A Finish Product Processing and Handling (continued)

<u>Description</u>: (continued)

(FB9) 30" Belt Conveyor and Transfer Point (from Finish Piles #1, #2, and #3 to Belt Conveyor FB10 and Finish Product Truck Loadout FP2)

Constructed: Pre-1975

Control: Moist Material (Water Sprays if needed)

(FB10)30" Belt Conveyor and Transfer Point (from FB 9 to Rail Loadout, FP3)

Constructed: Pre-1975

Control: Moist Material (Water Sprays if needed)

(-) Front-End Loader (Finish Piles #1, #2, #3, or #8 to Finish Piles #4, #5, #6, or #7)

Control: Moist Material

(-) Front-End Loader (Finish Piles #1 ,#2, #3, #4, #5, #6, #7, #8, or #9 to Truck or Rail Loadouts FP2 and FP3)

Control: Moist Material

(FS1) Finish Product Stockpiles #1, #2, #3, #4, #5, #6, #7, #8, and #9

Control: Moist Material

(-) Front-End Loader (Finish Piles#4, #5, #6, #7 or #8 to Specialty Mixer FM1)

Control: Moist Material

(FM1) Finish Product (Specialty) Mobile Mixer Units

Maximum Rated Capacity: 50 ton/hour

Control: Moist Material

(FM2) Finish Product (Specialty) Mobile Mixer Units

Maximum Rated Capacity: 50 ton/hour

Control: Moist Material

(-) Front-End Loader (Specialty Mixer to Finish Specialty Piles #10, #11, #12, #13, #14, #15, #16, #17, #18, #19, #20 or #21)

Control: Moist Material

(-) Front-End Loader (Finish Specialty Piles #10, #11, #12, #13, #14, #15, #16, #17, #18, #19, #20 or #21 to Truck or Rail Loadouts FP2 and FP3)

Control: Moist Material

(FS1) Finish Product (Specialty) Stockpiles #10, #11, #12, #13, #14, #15, #16, #17, #18, #19, #20, and #21

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SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Emission Unit 06A Finish Product Processing and Handling (continued)

Description: (continued)

(FP2) Finish Product Truck Loadout

Control: Moist Material

(FP3) Finish Product Rail Loadout

Control: Moist Material

Emission Unit 06C Alternate Finish Product Processing and Handling

Description:

Front-End Loader (Clinker Pile #3 or #4 to Dump Hopper RS5) **(-)**

(Alternate Finish Material Process)

Control: Moist Material

(RS5) Raw Material Truck Dump Receiving Hopper (Feeds Crusher RC1)

(Alternate Finish Material Process)

Maximum Rated Capacity: 500 ton/hour

Constructed: Pre-1975

Water Sprays (Moist Material) Control:

(RC1) Raw Material Crusher, Cedar Rapids Model 36-45 (Secondary)

(Feeds Belt Conveyor RB1) (Alternate Finish Material Process)

Maximum Rated Capacity: 500 ton/hour

Constructed: Pre-1975

Control: Partial Enclosure and Water Sprays (Moist Material)

(RB1) 30" Belt Conveyor and Transfer Point (from Crusher RC1 and Mobile

Crusher MC1 to Screening Unit RU1) (Alternate Finish Material Process)

Constructed: Pre-1975

Water Sprays (Moist Material) Control:

(RU1) Deister Triple Deck Vibrating Screen (Feeds Conveyors RB2, RB3, and RB4)

(Alternate Finish Material Process)

Maximum Rated Capacity: 500 ton/hour

Constructed: Pre-1975

Roof Cover (Moist Material) Control:

(RB2) 24" Belt Conveyor and Transfer Point (from Screening Unit RU1 to Crusher

RC1) (Alternate Finish Material Process)

Constructed: Pre-1975 Moist Material Control:

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SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Emission Unit 06C Alternate Finish Product Processing and Handling (continued)

<u>Description:</u> (continued)

(RB3) 24" Belt Conveyor and Transfer Point (from Screening Unit RU1 to Bulk Storage Bin RS3) (Alternate Finish Material Process)

Constructed: Pre-1975 Control: Moist Material

(RS3) Raw Material Fines Bulk Storage Bin (Feeds Truck Loadout RD1) (Alternate Finish Material Process)

Constructed: Pre-1975 Control: Moist Material

(RD1) Raw Material Bulk Fines Truck Loadout (to Stockpile, Finish Process Area) (Alternate Finish Material Process)

Constructed: Pre-1975 Control: Moist Material

(RB4) 24" Belt Conveyor and Transfer Point (from Screening Unit RU1 to Truck, Stockpiles, or Front-End Loader) (Alternate Finish Material Process)

Constructed: Pre-1975 Control: Moist Material

Emission Unit 08 Haul Road and Yard Area

Description:

(-) Five (5) miles of Unpaved Haul Road

Control: Truck Water Sprays and/or Wet Suppression

(-) Slurry Pond #1 Cleaning, Truck Loadout from Ponds to Quarry Backfill

Control: Moist Material

(-) Slurry Pond #2 Cleaning, Truck Loadout from Ponds to Quarry Backfill

Control: Moist Material

Emission Unit 09 Coal Handling and Processing

Description:

(-) Front End Loader (From Coal Stockpiles #1 or #2 to Dump Hopper CS1, Feed Hopper CS5, or Mobile Crusher MC1)

Control: Moist Material

(-) Truck Loadout (To Dump Hopper CS1 or Stockpiles #1 and #2)

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SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Emission Unit 09 Coal Handling and Processing (continued)

Description: (continued)

(CS6) Coal Stockpile #1

Control: Moist Material

(CS6) Coal Stockpile #2

Control: Moist Material

(CS1) Truck Dump Hopper (Feeds Belt Conveyor CB1)

Maximum Rated Capacity: 100 ton/hour

Constructed: Pre-1974

Control: Moist Material

(CB1) 24" Belt Conveyor and Transfer Point (from Dump Hopper CS1 and Mobile Crusher MC1 to Coal Bin CS2)

Constructed: Pre-1974 Control: Moist Material

(CS2) 400-Ton Coal Bin (Feeds Belt Conveyor CB2)

Constructed: Pre-1974 Control: Moist Material

(CB2) 24" Belt Conveyor and Transfer Point (from Bin CS2 to Belt Conveyor CB3)

Constructed: Pre-1974 Control: Moist Material

(CB3) 24" Belt Conveyor and Transfer Point (from CB2 to Feed Bin CS3 or Conveyor CB5)

Constructed: Pre-1974 Control: Moist Material

(CS5) Direct Feed Coal Hopper (Feeds to Belt Conveyor CB3)

Maximum Rated Capacity: 100 ton/hour

Constructed: Pre-1974
Control: Moist Material

(CS3) Coal Mill CP1 Feed Bin (Feeds to Belt Conveyor CB4)

Maximum Rated Capacity: 100 ton/hour

Constructed: Pre-1974 Control: Moist Material

(CB4) 18" Belt Conveyor and Transfer Point (from Feed Bin CS3 to Mill CP1)

Constructed: Pre-1974

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SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Emission Unit 09 Coal Handling and Processing (continued)

<u>Description:</u> (continued)

(CP1) Raymond Coal Mill for Kiln 3 (Enclosed Unit)

Maximum Rated Capacity: 100 ton/hour

Constructed: Pre-1974

(CB5) 24" Belt Conveyor and Transfer Point (from Conveyor CB3 to Bin CS4)

Constructed: Pre-1974
Control: Moist Material

(CS4) Coal Mill CP2 Feed Bin (Feeds Conveyor CB6)

Maximum Rated Capacity: 100 ton/hour

Constructed: Pre-1974 Control: Moist Material

(CB6) 18" Belt Conveyor and Transfer Point (from Feed Bin CS4 to Coal Mill CP2)

Constructed: Pre-1974
Control: Moist Material

(CB7) 18" Belt Conveyor and Transfer Point (for Kiln 2 and Coal Mill CP2)

Constructed: Under Construction 2006

Control: Moist Material

(CP2) Raymond Coal Mill for Kiln 2 (Enclosed Unit)

Maximum Rated Capacity: 100 ton/hour

Constructed: Pre-1974

(MC1) Mobile Scottsdale Crusher (Feeds Belt Conveyor CB1, Truck Dump Hopper CS1, Mobile Conveyors or Stockpiles)

Maximum Rated Capacity: 500 ton/hour

Constructed: 1996

Control: Moist Material

(MS1) Mobile Hopper (Feeds Mobile Conveyors)

Constructed: 1996

Control: Moist Material

(MS2) Mobile Hopper (Feeds Mobile Conveyors)

Constructed: 1996

Control: Moist Material

(MB1) Mobile Stacking Conveyor and Transfer Point

(from Mobile Hopper or Mobile Conveyors to Coal Stockpile #1 or #2)

Constructed: 1996

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SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Emission Unit 09 Coal Handling and Processing (continued)

<u>Description:</u> (continued)

(MB2) Mobile Stacking Conveyor and Transfer Point (from Mobile Hopper or Mobile Conveyors to Coal Stockpile #1 or #2)

Constructed: 1996

Control: Moist Material

(MB3) Mobile Stacking Conveyor and Transfer Point (from Mobile Hopper or Mobile Conveyors to Coal Stockpile #1 or #2)

Constructed: 1996

Control: Moist Material

(MB4)Mobile Stacking Conveyor and Transfer Point (from Mobile Hopper or Mobile Conveyors to Coal Stockpile #1 or #2)

Constructed: Proposed Construction 2006

Control: Moist Material

(MB5)Mobile Stacking Conveyor and Transfer Point (from Mobile Hopper or Mobile Conveyors to Coal Stockpile #1 or #2)

Constructed: Proposed Construction 2006

Control: Moist Material

(MB6) Mobile Stacking Conveyor and Transfer Point (from Mobile Hopper or Mobile Conveyors to Coal Stockpile #1 or #2)

Constructed: Proposed Construction 2006

Control: Moist Material

(MB7) Mobile Stacking Conveyor and Transfer Point (from Mobile Hopper or Mobile Conveyors to Coal Stockpile #1 or #2)

Constructed: Proposed Construction 2006

Control: Moist Material

APPLICABLE REGULATIONS:

401 KAR 63:010, Fugitive emissions is applicable to each affected facility which emits or may emit fugitive emissions and is not elsewhere subject to an opacity standard within the administrative regulations of the Division for Air Quality.

1. **Operating Limitations:**

- a. The total of all finished product onsite at any one time shall not exceed 332,880 ton.
- b. To preclude applicability of 401 KAR 60:005, incorporating by reference 40 CFR 60, subpart Y, Standards of Performance for Coal Preparation Plants commencing construction or modification after October 24, 1974, each affected facility processing coal shall not process more than 200 tons of coal each day.

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SECTION B – EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

2. <u>Emission Limitations</u>:

- a. The materials processed at each affected facility listed above shall be controlled with wet suppression, enclosures, and/or dust collection equipment so as to comply with the requirements specified in 401 KAR 63:010, Section 3, Standards for Fugitive Emissions.
- b. Pursuant to 401 KAR 63:010, Section 3 (1), no person shall cause, suffer, or allow any material to be handled, processed, transported, or stored; a building or its appurtenances to be constructed, altered, repaired, or demolished, or a road to be used without taking reasonable precaution to prevent particulate matter from becoming airborne. Such reasonable precautions shall include, when applicable, but not be limited to the following:
 - (1) Use, where possible, of water or chemicals for control of dust in the demolition of existing buildings or structures, construction operations, the grading of roads or the clearing of land;
 - (2) Application and maintenance of asphalt, oil, water, or suitable chemicals on roads, materials stockpiles, and other surfaces which can create airborne dusts; 40 CFR 279.12 (b) prohibits the use of Used Oil as a dust suppressant.
 - (3) Installation and use of hoods, fans, and fabric filters to enclose and vent the handling of dusty materials, or the use of water sprays or other measures to suppress the dust emissions during handling. Adequate containment methods shall be employed during sandblasting or other similar operations.
 - (4) Covering, at all times when in motion, open bodied trucks transporting materials likely to become airborne;
 - (5) The maintenance of paved roadways in a clean condition;
 - (6) The prompt removal of earth or other material from a paved street which earth or other material has been transported thereto by trucking or earth moving equipment or erosion by water.
- c. Pursuant to 401 KAR 63:010, Section 3 (2), no person shall cause or permit the discharge of visible fugitive dust emissions beyond the lot line of the property on which the emissions originate.
- d. Pursuant to 401 KAR 63:010, Section 3 (3), when dust, fumes, gases, mist, odorous matter, vapors, or any combination thereof escape from a building or equipment in such a manner and amount as to cause a nuisance or to violate any administrative regulation, the Secretary may order that the building or equipment in which processing, handling and storage are done be tightly closed and ventilated in such a way that all air and gases and air or air-borne material leaving the building or equipment are treated by removal or destruction of air contaminants before discharge to the open air.

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SECTION B – EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

2. <u>Emission Limitations</u>: (Continued)

- e. Pursuant to 401 KAR 63:010, Section 4, Additional Requirements, in addition to the requirements of Section 3 of this regulation, the following shall apply:
 - (1) Pursuant to 401 KAR 63:010, Section 4 (1), open bodied trucks, operating outside company property, transporting materials likely to become airborne shall be covered at all times when in motion.
 - (2) Pursuant to 401 KAR 63:010, Section 4 (4), no one shall allow earth or other material being transported by truck or earth moving equipment to be deposited onto a paved street or roadway.

f. Compliance Demonstration Method:

(1) For the purpose of demonstration of continuing compliance, the following guidelines shall be followed:

Pursuant to 401 KAR 50:055, General compliance requirements, Section 2(5), all air pollution control equipment and all pollution control measures proposed by the application in response to which this permit is issued shall be in place, properly maintained, and in operation in accordance with the manufacturer's specifications and/or standard operating procedures at any time an affected facility for which the equipment and measures are designed is operated, except as provided by 401 KAR 50:055, Section 1. The permittee shall record the occurrence, duration, cause, and any corrective action taken for each incident when the emission points are in operation but the associated control equipment is not.

(2) See 4. Specific Monitoring Requirements of this subsection below.

3. Testing Requirements:

None

4. **Specific Monitoring Requirements:**

- a. Visual observations shall be made during each shift, and when any change in method of operation or material occurs, of all operations and control equipment to ensure the control equipment is functioning while the associated equipment is in operation and to determine if any fugitive air emissions are being generated in such a manner as to cause a nuisance or to cross the property line. If such a condition develops, water or another wetting agent shall be applied to suppress the fugitive air emissions so as to comply with the applicable requirements of 401 KAR 63:010 as listed above.
- b. In addition, visual observations shall be made daily during plant operation to determine if fugitive dust is becoming airborne from the haul road, yard area, or storage areas as the result of vehicular traffic or windy conditions. If such a condition develops, water or a chemical wetting agent shall be applied to these areas as specified in 401 KAR 63:010 as listed above.
- c. See Section F, Conditions 2, 7, and 8.

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SECTION B – EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

5. Specific Recordkeeping Requirements:

- a. Records of daily observations, and support information shall be kept in accordance with the provisions of Section F, Condition 2. See 4.a. and b. in this subsection above.
- b. A log shall be kept of all routine and non-routine maintenance performed on each control device.
- c. See Section F, Conditions 1 and 2.

Specific Reporting Requirements:

- a. See Section F, Conditions 5, 6, 7, 8, 9, and 10.
- b. See Section G, Conditions (a)4, (a)5, and (f)1.

7. **Specific Control Equipment Operating Conditions:**

- a. All air pollution equipment and all pollution control measures shall be in place, properly maintained, and in operation as necessary to maintain compliance with the permitted emission limitations, and in accordance with the manufacture's specifications and/or standard operating procedures.
- b. See Section E for further requirements.

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SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Emission Points of Equipment associated with Emission Units 05B and 06B Subject to New Source Performance Standards:

Emission Unit 05B Raw Material Handling and Processing

Description:

(PS4) Light Aggregate Kiln Dust (LAKD) Extruder Fines Bulk Storage Bin (Feeds Material Collected from Baghouses PP1 and PP2 to Extruder PE1 or Loadout to Quarry)

Constructed: 1994

Control: Bin Vent (Baghouse)

(SC1) Enclosed Screw Conveyor (from Bulk Storage Bin RS3 to Extruder Bin RS4)

Constructed: 1994

Control: Enclosure (Moist Material)

(RS4) Raw Material Fines Extruder Storage Bin (Feeds Extruder PE1)

Constructed: 1994

Control: Moist Material

(PE1) Extruder (Mixes Material from Raw Fines Bin RS4 & LAKD Bin PS4 while feeding onto Belt Conveyor PB6)

Constructed: 1994

Control: Partial Enclosure

(PS5) Raw Material Feed Bin (for Kiln2)

Constructed: Under Construction 2006

Control: Moist Material

(PB8) 18" Belt Conveyor and Transfer Point (for Kiln 2 Raw Feed System)

Constructed: Under Construction 2006

Control: Moist Material

(PB9) 18" Belt Conveyor and Transfer Point (for Kiln 2 Raw Feed System)

Constructed: Under Construction 2006

Control: Moist Material

(PB10)18" Belt Conveyor and Transfer Point (for Kiln 2 Raw Feed System)

Constructed: Under Construction 2006

Control: Moist Material

(MC1) Mobile Scottsdale Crusher (Feeds Belt Conveyor RB1, RB2, RB4, RS5, PB1, PB2, FS1 Stockpiles or Mobile Conveyors)

Maximum Rated Capacity: 500 ton/hour

Constructed: 1996

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SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Emission Unit 05B Raw Material Handling and Processing (continued)

<u>Description</u>:(continued)

(MS1) Mobile Hopper (Feeds Belt Conveyor RB1, RB2, RB4, RS5, PB1, PB2, or Mobile Conveyors)

Constructed: 1996

Control: Moist Material

(MS2) Mobile Hopper (Feeds Belt Conveyor RB1, RB2, RB4, PB1, PB2, or Mobile Conveyors)

Constructed: 1996

Control: Moist Material

(MB1) Mobile Stacking Conveyor and Transfer Point (Feeds Belt Conveyor RB1, RB2, RB4, RS5, PB1, PB2, FS1 Stockpiles or Mobile Conveyors)

Constructed: 1996

Control: Moist Material

(MB2) Mobile Stacking Conveyor and Transfer Point (Feeds Belt Conveyor RB1, RB2, RB4, RS5, PB1, PB2, FS1 Stockpiles or Mobile Conveyors

Constructed: 1996

Control: Moist Material

(MB3) Mobile Stacking Conveyor and Transfer Point (Feeds Belt Conveyor RB1, RB2, RB4, RS5, PB1, PB2, FS1 Stockpiles or Mobile Conveyors)

Constructed: 1996

Control: Moist Material

(MB4)Mobile Stacking Conveyor and Transfer Point (Feeds Belt Conveyor RB1, RB2, RB4, RS5, PB1, PB2, FS1 Stockpiles or Mobile Conveyors)

Constructed: Proposed Construction 2006

Control: Moist Material

(MB5) Mobile Stacking Conveyor and Transfer Point (Feeds Belt Conveyor RB1, RB2, RB4, RS5, PB1, PB2, FS1 Stockpiles or Mobile Conveyors)

Constructed: Proposed Construction 2006

Control: Moist Material

(MB6) Mobile Stacking Conveyor and Transfer Point (Feeds Belt Conveyor RB1, RB2, RB4, RS5, PB1, PB2, FS1 Stockpiles or Mobile Conveyors)

Constructed: Proposed Construction 2006

Control: Moist Material

(MB7) Mobile Stacking Conveyor and Transfer Point (Feeds Belt Conveyor RB1, RB2, RB4, RS5, PB1, PB2, FS1 Stockpiles or Mobile Conveyors)

Constructed: Proposed Construction 2006

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SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Emission Unit 06B Finish Product Processing and Handling

Description:

(FS2) Stationary Hopper (Feeds Crusher FC3)

Maximum Rated Capacity: 250 ton/hour Constructed: Proposed Installation 2007

Control: Partial Enclosure and Water Sprays (Moist Material)

(FC3) Stationary Roto Crusher, (Primary) (Feeds Conveyor FB1)

Maximum Rated Capacity: 250 ton/hour Constructed: Proposed Installation 2007

Control: Partial Enclosure and Water Sprays (Moist Material)

(FU1) Tabor Triple Deck Vibrating Screen

(Feeds Crusher FC1 and Mobile Belt Conveyor MB1)

Maximum Rated Capacity: 250 ton/hour

Constructed: Modified 1999

Control: Enclosure (Moist Material)

(FU2) Allis Chalmers Triple Deck Vibrating Screen

(Feeds Crusher FC2 and Belt Conveyors FB6, FB7, and FB8)

Maximum Rated Capacity: 250 ton/hour Constructed: Proposed Modification 2006 Control: Enclosure (Moist Material)

(FU3) Allis Chalmers Triple Deck Vibrating Screen

(Feeds Crusher FC2 and Belt Conveyors FB6, FB7, and FB8)

Maximum Rated Capacity: 250 ton/hour Constructed: Modified After 1990 Control: Enclosure (Moist Material)

(MC1) Mobile Scottsdale Crusher (Feeds Mobile Conveyors, Finish Stockpiles or Conveyor FB1)

Maximum Rated Capacity: 500 ton/hour

Constructed: 1996

Control: Moist Material

(MS1) Mobile Hopper (Feeds Conveyors FB3, FB4, FB5, or Mobile Conveyors)

Constructed: 1996

Control: Moist Material

(MS2) Mobile Hopper (Feeds Conveyors FB3, FB4, FB5, or Mobile Conveyors)

Constructed: 1996

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SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Emission Unit 06B Finished Product Processing and Handling (continued)

<u>Description</u>:(continued)

(MB1) Mobile Stacking Conveyor and Transfer Point (from Screening Unit FU1 to Finish Product Pile #9)

Constructed: 1996

Control: Moist Material

(MB2) Mobile Undercar Unloading Conveyor and Transfer Point (from Rail Loadout FP3 to Conveyor MB3)

Constructed: 1996

Control: Moist Material

(MB3)Mobile Stacking Conveyor and Transfer Point (from Conveyor MB2 to Finish Pile #8)

Constructed: 1996

Control: Moist Material

(MB4) Mobile Stacking Conveyor and Transfer Point (from Mobile Crusher MC1, Conveyors MB2, MB3, MB5, MB6, and/or MB7 to Finish Piles, Specialty Piles and Mixers FM1 and FM2)

Constructed: Proposed Construction 2006

Control: Moist Material

(MB5) Mobile Stacking Conveyor and Transfer Point (from Mobile Crusher MC1, Conveyors MB2, MB3, MB4, MB6, and/or MB7 to Finish Piles, Specialty Piles and Mixers FM1 and FM2)

Constructed: Proposed Construction 2006

Control: Moist Material

(MB6) Mobile Stacking Conveyor and Transfer Point (from Mobile Crusher MC1, Conveyors MB2, MB3, MB4, MB5, and/or MB7 to Finish Piles, Specialty Piles and Mixers FM1 and FM2)

Constructed: Proposed Construction 2006

Control: Moist Material

(MB7) Mobile Stacking Conveyor and Transfer Point (from Mobile Crusher MC1, Conveyors MB2, MB3, MB4, MB5, and/or MB6 to Finish Piles, Specialty Piles and Mixers FM1 and FM2)

Constructed: Proposed Construction 2006

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SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Emission Points of Equipment associated with Emission Units 05B and 06B Subject to New Source Performance Standards:

Emission Unit 05B Raw Material Handling and Processing

Emission Unit 06B Finish Product Processing and Handling

APPLICABLE REGULATIONS:

401 KAR 60:670, incorporating by reference 40 CFR 60, Subpart OOO (as modified by Section 3 of 401 KAR 60:670), Standards of Performance for Nonmetallic Mineral Processing Plants, commencing construction, reconstruction, or modification after August 31, 1983; applies to each of the affected facilities listed above.

1. Operating Limitations:

None

2. Emission Limitations:

- a. For emission points FS2, MS1, MS2, MB1, MB2, MB3, MB4, MB5, MB6, MB7, PS5, PB8, PB9, PB10, SC1, RS4, and PE1, pursuant to 401 KAR 60:670, incorporating by reference 40 CFR 60.672 (b), no owner or operator shall cause to be discharged into the atmosphere any fugitive emissions which exhibit greater than ten (10) percent opacity.
- b. For emission points FU1, FU2, and FU3, pursuant to 401 KAR 60:670 Section 3(1)(b), where US EPA Reference Method 9 can not be applied for an affected facility enclosed inside a building, and pursuant to 401 KAR 60:670 Section 3(2)(c), where that same building encloses a crusher (FC1 or FC2), the discharge of fugitive emissions shall not exceed fifteen (15) percent opacity.
- c. For emission points MC1, and FC3, pursuant to 401 KAR 60:670, incorporating by reference 40 CFR 60.672 (c), no owner or operator shall cause to be discharged into the atmosphere from any crusher, at which a capture system is not used, any fugitive emissions which exhibit greater than fifteen (15) percent opacity.
- d. For emission point PS4, pursuant to 401 KAR 60:670, incorporating by reference 40 CFR 60.672 (f), no owner or operator shall cause to be discharged into the atmosphere from any baghouse that controls emissions from only an individual, enclosed storage bin, stack emissions which exhibit greater than seven (7) percent opacity.

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SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

3. <u>Testing Requirements</u>:

- a. The permittee will be required to conduct one performance test for particulate emissions on each of the affected facilities listed in this subsection to demonstrate initial compliance with the particulate standard unless the permittee can prove an initial compliance test has already been conducted. Pursuant to 40 CFR 60.675(a), in conducting these performance tests, the permittee shall use as reference methods and procedures the test methods in 40 CFR 60 Appendix A or other methods and procedures specified in 40 CFR 60.675 and below. No other performance tests will be required during the life of this permit, however, the Division may request a performance test be conducted on a specific affected facility for reasons including, but not limited to multiple reported opacity limit exceedances.
- b. Pursuant to 40 CFR 60.675(c)(1) and 40 CFR 60.8, for emission points MS1, MS2, MB1, MB2, MB3, SC1, RS4, and PE1, within six months of issuance of this permit; and FS2, MB4, MB5, MB6, MB7, PS5, PB8, PB9, and PB10 within 60 days after achieving the maximum production rate which the affected facility will be operated, but not later than 180 days after initial startup following installation; the permittee shall conduct a performance test to demonstrate compliance with the particulate standard. Opacity shall be determined using USEPA Reference Method 9 and the procedures in 40 CFR 60.11. The duration of the Method 9 observations shall be a minimum of 1 hour (ten 6-minute averages) in length, with the following additions listed from 40 CFR 60.675 (c) (1):
 - (i) The minimum distance between the observer and the emission source shall be fifteen (15) feet.
 - (ii) The observer shall, when possible, select a position that minimizes interference from other sources (e.g. road dust). The required observer position relative to the sun (Method 9, Section 2.1) must be followed.
 - (iii)When a water mist due to using wet suppression is present, the observation of emissions is to be made at a point in the plume where the mist is no longer visible. The water mist is not to be considered a visible emission.
- c. Pursuant to 40 CFR 60.675(d) and 40 CFR 60.8, for emission points FU1, FU2, and FU3, within 60 days after FU2 achieves the maximum production rate which the affected facility will be operated, but not later than 180 days after initial startup following modification, the permittee shall conduct a performance test to demonstrate compliance with the particulate standard. The permittee shall use USEPA Reference Method 22 to determine fugitive emissions. The performance test shall be conducted while all emission points located inside the building are operating and shall be at least 75 minutes in duration, with each side of the building and the roof being observed for at least 15 minutes. Additionally, opacity shall be determined, using USEPA Reference Method 9 and the procedures in 40 CFR 60.11, for each side of the building and the roof where visible emissions are observed to occur for one (1) minute or more during the respective 15 minute observation period. The duration of the Method 9 observation, if needed, shall be a minimum of 1 hour (ten 6-minute averages) in length.

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SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Testing Requirements: (continued)

- d. Pursuant to 40 CFR 60.675 (c)(4) and 40 CFR 60.8, for emission points MC1, within 6 months of issuance of this permit, and FC3, within 60 days after achieving the maximum production rate which the affected facility will be operated, but not later than 180 days after initial startup following installation, the permittee shall conduct a performance test to demonstrate compliance with the particulate standard. Opacity shall be determined using USEPA Reference Method 9 and the procedures in 40 CFR 60.11 along with the additions listed in 40 CFR 60.675 (c) (1). The duration of the Method 9 observations may be reduced from 3 hours (thirty 6-minute averages) to 1 hour (ten 6-minute averages) only if the following conditions apply:
 - (i) There are no individual readings greater than 15 percent opacity; and
 - (ii) There are no more than 3 readings of 15 percent for the 1-hour period.
- e. Pursuant to 40 CFR 60.675(c)(2) and 40 CFR 60.8, for emission point PS4, within six months of issuance of this permit, the permittee shall conduct a performance test to demonstrate compliance with the particulate standard. Opacity shall be determined using USEPA Reference Method 9, the duration of the observations shall be 1 hour (ten 6-minute averages).

4. Specific Monitoring Requirements:

- a. Qualitative observations are required during each shift, and when any change in method of operation or material occurs, of all operations and control equipment to ensure the control equipment is functioning while the associated equipment is in operation and to determine if any air emissions are visible from the equipment or the controls. These observations will be done at a processing rate of the equipment that would preclude circumvention of the intent of this requirement. If visible emissions are seen coming from any emission point or any enclosure housing emission points listed within this subsection, the permittee shall initiate an inspection of the emission unit and, if necessary, make repairs or adjustments to the emission controls.
- b. At a minimum of once per calendar quarter in which an affected facility listed in this subsection was operated, USEPA Reference Method 9 observations shall be performed on each affected facility not located in a building enclosure, while the facility is in normal operation. These observations may include a minimum of one set of six-minute average data.
- c. At a minimum of once per calendar quarter, for the building enclosures housing FU1, FU2, or FU3, the permittee shall use USEPA Reference Method 22 to determine fugitive emissions. The observation shall be conducted while all emission points located inside the building are operating and shall be at least 75 minutes in duration, with each side of the building and the roof being observed for at least 15 minutes. The amount of time that visible emissions occur during the observation period (accumulated emission time for each side) shall be recorded in the daily log.

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SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

4. <u>Monitoring Requirements</u>: (continued)

c. (continued)

Additionally, opacity shall be determined, using USEPA Reference Method 9 and the procedures in 40 CFR 60.11, for each side of the building and the roof where visible emissions are observed to occur for one (1) minute or more during the respective 15 minute observation period. The duration of the Method 9 observations may include a minimum of one set of six-minute average data. The opacity observed shall be recorded in the daily log.

d. See Section F, Conditions 2, 7, and 8.

5. Specific Recordkeeping Requirements:

- a. Records of opacity monitoring data, including daily observations, and support information shall be kept in accordance with the provisions of Section F, Condition 2. See 4.a. in this subsection above.
- b. A log shall be kept of all routine and non-routine maintenance performed on each control device.
- c. See Section F, Conditions 1 and 2.

Specific Reporting Requirements:

- a. Pursuant to 401 KAR 50:020 Section 18, the permittee shall notify the Division in writing when any mobile equipment is permanently removed from the plant site or new mobile equipment is added to the plant site at least seven (7) business days prior to the change.
- b. See Section F, Conditions 5, 6, 7, 8, 9, 10, and 11.
- c. See Section G, Conditions (a)4, (a)5, and (f)1.
- d. See Section G, Conditions (d)2, (d)3, (d)4, and (d)5.

7. Specific Control Equipment Operating Conditions:

- a. All air pollution equipment and all pollution control measures shall be in place, properly maintained, and in operation as necessary to maintain compliance with the permitted emission limitations, and in accordance with the manufacture's specifications and/or standard operating procedures.
- b. See Section E for further requirements.

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SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

8. <u>Alternate Operating Scenarios</u>:

a. The permittee may operate and use any of the mobile equipment listed above with no allowance for variance from all of the emission limitations contained within this permit.

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SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Emission Unit 07 (PS2) Lime Storage Silo

Description:

Lime Storage silo with pneumatic conveyance pipes to each Baghouse (PP1, PP2) ductwork

Maximum Process Rating: 25 tons/hour

Constructed: 1987

Controls: Bin Vent (Baghouse)

Emission Unit 11 (PS1) Light Aggregate Kiln Dust (LAKD) Storage Silo

Description:

LAKD Storage Silo with pneumatic conveyance pipes from each Baghouse (PP1, PP2) hopper, one enclosed screw conveyor to truck loadout, and one pneumatic conveyor to LAKD Filter Receiver (FP1).

Maximum Process Rating: 15 tons/hour

Constructed: 1994

Controls: Bin Vent (Baghouse)

Emission Unit 12 (FP1) LAKD Filter Receiver

Description:

LAKD Filter Receiver located above FB6, used for truck load-out to quarry backfill or to finish product stockpile.

Maximum Process Rating: 15 tons/hour

Constructed: 1994

Controls: Filter Receiver (Baghouse)

APPLICABLE REGULATIONS:

401 KAR 59:010, New Process Operations Commencing after July 2, 1975.

1. Operating Limitations:

The operating rates for the LAKD processes including Emission Unit 11 (PS1) and Emission Unit 12 (FP1) shall not exceed 15,000 lbs/hour each.

2. Emission Limitations:

a. Pursuant to 401 KAR 59:010 Section 3 (2), particulate emissions from Emission Unit 11 (PS1) and Emission Unit 12 (FP1) shall not exceed 12.5 lbs/hour each based on a three-hour average and 54.8 tons/year each, and particulate emissions from Emission Unit 7 (PS2) shall not exceed 26.4 lbs/hour on a three hour average and 115.7 tons/year.

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SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

2. <u>Emission Limitations</u>: (continued)

- b. The permittee may assure compliance with the particulate emission standard for using the following equations:
 - (1) For Emission Units 11 (PS1) or 12 (FP1):
 Particulate Emissions (lb/hr) = [(LAKD Feed Rate in tons/hr multiplied by 0.003 lbs/ton (AP-42 Factor)) multiplied by (1.0 minus control efficiency)]
 - (2) For Emission Unit 7 (PS2):
 Particulate Emissions (lb/hr) = [(Lime Loading Rate in tons/hr multiplied by 0.61 lbs/ton (AP-42 Factor)) multiplied by (1.0 minus control efficiency)]
- c. For Emission Units 11 (PS1), 12 (FP1), and 7 (PS2), pursuant to 401 KAR 59:010, Section 3(1)(a), the permittee shall not cause, suffer, allow, or permit any continuous emissions in to the open air from a control device or stack associated with any affected facility which is equal to or greater than twenty (20) percent opacity based on six-minute averages.

3. <u>Testing Requirements</u>:

- a. The permittee will not be required to conduct performance tests for particulate emissions for each of these emission units during the life of this permit to demonstrate compliance with the particulate standard. However, the Division may request a performance test be conducted for reasons including, but not limited to multiple reported opacity standard exceedances.
- b. While conducting performance tests to demonstrate compliance with the particulate standards, for each test run, the permittee shall record representative operational data of the control equipment and read the visible emissions, weather permitting, using U.S. EPA Reference Method 9.

4. **Specific Monitoring Requirements:**

- a. While each unit is in operation, the permittee shall monitor the amount of LAKD and Lime processed on an hourly basis for each emission unit.
- b. The permittee shall perform a qualitative visual observation of the opacity of emissions for each emission unit on a daily basis when the units are operating and maintain a log of the observations. If visible emissions from any emission unit are seen, the permittee shall initiate an inspection of the emission unit and, if necessary, make repairs or adjustments to the emission controls.
- c. At a minimum of once per calendar quarter when an emission unit operated, and when an emission unit is in operation, USEPA Reference Method 9 observations shall be performed on each bin vent (baghouse) of PS2, PS1, and FP1. These observations may each include a minimum of one set of six-minute average data.

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SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

5. **Specific Recordkeeping Requirements:**

- a. The permittee shall maintain records of the amount of LAKD and Lime processed on an hourly basis.
- b. Records regarding all Reference Method 9 observations, routine and non-routine maintenance, and the unit operation of the control equipment shall be maintained.

Specific Reporting Requirements:

See Section F, Conditions 5, 6, 7, 8, and 9.

7. Specific Control Equipment Operating Conditions:

- a. All air pollution equipment and all pollution control measures shall be in place, properly maintained, and in operation as necessary to maintain compliance with the permitted emission limitations, and in accordance with the manufacture's specifications and/or standard operating procedures.
- b. The control efficiency of each Bin Vent (Baghouse) of Emission Units 11 (PS1), 12 (FP1), and 7 (PS2), shall be maintained at a minimum of 99.0 percent.
- c. See Section E for further requirements.

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SECTION C - INSIGNIFICANT ACTIVITIES

The following listed activities have been determined to be insignificant activities for this source pursuant to 401 KAR 52:020, Section 6. While these activities are designated as insignificant the permittee must comply with the applicable regulation and some minimal level of periodic monitoring may be necessary.

	<u>Description</u>	Generally Applicable Regulation
1.	5000 Gallon Diesel Storage Tank	401 KAR 61:050
2.	500 Gallon Gasoline Storage Tank	N/A
3.	300 Gallon Waste Oil Tank	N/A
4.	2- 500 Gallon Oil Tanks	N/A

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SECTION D - SOURCE EMISSION LIMITATIONS AND TESTING REQUIREMENTS

1. As required by Section 1b of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26; compliance with annual emissions and processing limitations contained in this permit, shall be based on emissions and processing rates for any twelve (12) consecutive months.

2. Sulfur Dioxide, Particulate Matter, and opacity emissions, measured by applicable reference methods, or an equivalent or alternative method specified in 40 C.F.R. Chapter I, or by a test method specified in the state implementation plan shall not exceed the respective limitations specified herein.

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SECTION E - SOURCE CONTROL EQUIPMENT REQUIREMENTS

Pursuant to 401 KAR 50:055, Section 2(5), at all times, including periods of startup, shutdown and malfunction, owners and operators shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Division which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.

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SECTION F - MONITORING, RECORDKEEPING, AND REPORTING REQUIREMENTS

- 1. Pursuant to Section 1b (IV)1 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26, when continuing compliance is demonstrated by periodic testing or instrumental monitoring, the permittee shall compile records of required monitoring information that include:
 - a. Date, place as defined in this permit, and time of sampling or measurements;
 - b. Analyses performance dates;
 - c. Company or entity that performed analyses;
 - d. Analytical techniques or methods used;
 - e. Analyses results; and
 - f. Operating conditions during time of sampling or measurement.
- 2. Records of all required monitoring data and support information, including calibrations, maintenance records, and original strip chart recordings, and copies of all reports required by the Division for Air Quality, shall be retained by the permittee for a period of five years and shall be made available for inspection upon request by any duly authorized representative of the Division for Air Quality [Sections 1b(IV) 2 and 1a(8) of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].
- 3. In accordance with the requirements of 401 KAR 52:020 Section 3(1)h the permittee shall allow authorized representatives of the Cabinet to perform the following during reasonable times:
 - a. Enter upon the premises to inspect any facility, equipment (including air pollution control equipment), practice, or operation;
 - b. To access and copy any records required by the permit:
 - c. Sample or monitor, at reasonable times, substances or parameters to assure compliance with the permit or any applicable requirements.

Reasonable times are defined as during all hours of operation, during normal office hours, or during an emergency.

- 4. No person shall obstruct, hamper, or interfere with any Cabinet employee or authorized representative while in the process of carrying out official duties. Refusal of entry or access may constitute grounds for permit revocation and assessment of civil penalties.
- 5. Summary reports of any monitoring required by this permit, other than continuous emission or opacity monitors, shall be submitted to the Regional Office listed on the front of this permit at least every six (6) months during the life of this permit, unless otherwise stated in this permit. For emission units that were still under construction or which had not commenced operation at the end of the 6-month period covered by the report and are subject to monitoring requirements in this permit, the report shall indicate that no monitoring was performed during the previous six months because the emission unit was not in operation [Section 1b (V)1 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].

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SECTION F - MONITORING, RECORDKEEPING, AND REPORTING REQUIREMENTS (CONTINUED)

- 6. The semi-annual reports are due by January 30th and July 30th of each year. All reports shall be certified by a responsible official pursuant to 401 KAR 52:020 Section 23. If continuous emission and opacity monitors are required by regulation or this permit, data shall be reported to the Technical Services Branch in accordance with the requirements of 401 KAR 59:005, General Provisions, Section 3(3). All deviations from permit requirements shall be clearly identified in the reports.
- 7. In accordance with the provisions of 401 KAR 50:055, Section 1 the owner or operator shall notify the Regional Office listed on the front of this permit concerning startups, shutdowns, or malfunctions as follows:
 - a. When emissions during any planned shutdowns and ensuing startups will exceed the standards, notification shall be made no later than three (3) days before the planned shutdown, or immediately following the decision to shut down, if the shutdown is due to events which could not have been foreseen three (3) days before the shutdown.
 - b. When emissions due to malfunctions, unplanned shutdowns and ensuing startups are or may be in excess of the standards, notification shall be made as promptly as possible by telephone (or other electronic media) and shall be submitted in writing upon request.
- 8. The owner or operator shall report emission related exceedances from permit requirements including those attributed to upset conditions (other than emission exceedances covered by Section F.7. above) to the Regional Office listed on the front of this permit within 30 days. Other deviations from permit requirements shall be included in the semiannual report required by Section F.6 [Section 1b (V) 3, 4. of the Cabinet Provisions and Procedures for Issuing Title V Permits incorporated by reference in 401 KAR 52:020, Section 26].
- 9. Pursuant to 401 KAR 52:020, Permits, Section 21, the permittee shall annually certify compliance with the terms and conditions contained in this permit, by completing and returning a Compliance Certification Form (DEP 7007CC) (or an alternative approved by the regional office) to the Regional Office listed on the front of this permit and the U.S. EPA in accordance with the following requirements:
 - a. Identification of the term or condition;
 - b. Compliance status of each term or condition of the permit;
 - c. Whether compliance was continuous or intermittent;
 - d. The method used for determining the compliance status for the source, currently and over the reporting period.
 - e. For an emissions unit that was still under construction or which has not commenced operation at the end of the 12-month period covered by the annual compliance certification, the permittee shall indicate that the unit is under construction and that compliance with any applicable requirements will be demonstrated within the timeframes specified in the permit.

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SECTION F - MONITORING, RECORDKEEPING, AND REPORTING REQUIREMENTS (CONTINUED)

f. The certification shall be postmarked by January 30th of each year. Annual compliance certifications should be mailed to the following addresses:

Division for Air Quality Frankfort Regional Office 643 Teton Trail, STE B Frankfort, KY 40601-1758 U.S. EPA Region 4 Air Enforcement Branch Atlanta Federal Center 61 Forsyth St. Atlanta, GA 30303-8960

Division for Air Quality Central Files 200 Fair Oaks Lane, First Floor Frankfort, KY 40601

- 10. In accordance with 401 KAR 52:020, Section 22, the permittee shall provide the Division with all information necessary to determine its subject emissions within thirty (30) days of the date the KYEIS emission survey is mailed to the permittee.
- 11. Results of performance test(s) required by the permit shall be submitted to the Division by the source or its representative within forty-five days or sooner if required by an applicable standard, after the completion of the fieldwork.

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SECTION G - GENERAL PROVISIONS

(a) <u>General Compliance Requirements</u>

1. The permittee shall comply with all conditions of this permit. Noncompliance shall be a violation of 401 KAR 52:020 and of the Clean Air Act and is grounds for enforcement action including but not limited to termination, revocation and reissuance, revision or denial of a permit [Section 1a, 3 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020 Section 26].

- 2. The filing of a request by the permittee for any permit revision, revocation, reissuance, or termination, or of a notification of a planned change or anticipated noncompliance, shall not stay any permit condition [Section 1a, 6 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].
- 3. This permit may be revised, revoked, reopened and reissued, or terminated for cause in accordance with 401 KAR 52:020, Section 19. The permit will be reopened for cause and revised accordingly under the following circumstances:
 - a. If additional applicable requirements become applicable to the source and the remaining permit term is three (3) years or longer. In this case, the reopening shall be completed no later than eighteen (18) months after promulgation of the applicable requirement. A reopening shall not be required if compliance with the applicable requirement is not required until after the date on which the permit is due to expire, unless this permit or any of its terms and conditions have been extended pursuant to 401 KAR 52:020, Section 12;
 - b. The Cabinet or the U. S. EPA determines that the permit must be revised or revoked to assure compliance with the applicable requirements;
 - c. The Cabinet or the U. S. EPA determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit;

Proceedings to reopen and reissue a permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of the permit for which cause to reopen exists. Reopenings shall be made as expeditiously as practicable. Reopenings shall not be initiated before a notice of intent to reopen is provided to the source by the Division, at least thirty (30) days in advance of the date the permit is to be reopened, except that the Division may provide a shorter time period in the case of an emergency.

- 4. The permittee shall furnish information upon request of the Cabinet to determine if cause exists for modifying, revoking and reissuing, or terminating the permit; or to determine compliance with the conditions of this permit [Section 1a, 7,8 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].
- 5. The permittee, upon becoming aware that any relevant facts were omitted or incorrect information was submitted in the permit application, shall promptly submit such facts or corrected information to the permitting authority [401 KAR 52:020, Section 7(1)].

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SECTION G - GENERAL PROVISIONS (CONTINUED)

6. Any condition or portion of this permit which becomes suspended or is ruled invalid as a result of any legal or other action shall not invalidate any other portion or condition of this permit [Section 1a, 14 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].

- 7. The permittee shall not use as a defense in an enforcement action the contention that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance [Section 1a, 4 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].
- 8. Except for requirements identified in this permit as state-origin requirements, all terms and conditions shall be enforceable by the United States Environmental Protection Agency and citizens of the United States [Section 1a, 15 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].
- 9. This permit shall be subject to suspension if the permittee fails to pay all emissions fees within 90 days after the date of notice as specified in 401 KAR 50:038, Section 3(6) [Section 1a, 10 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].
- 10. Nothing in this permit shall alter or affect the liability of the permittee for any violation of applicable requirements prior to or at the time of permit issuance [401 KAR 52:020, Section 11(3)(b)].
- 11. This permit does not convey property rights or exclusive privileges [Section 1a, 9 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].
- 12. Issuance of this permit does not relieve the permittee from the responsibility of obtaining any other permits, licenses, or approvals required by the Kentucky Cabinet for Environmental and Public Protection or any other federal, state, or local agency.
- 13. Nothing in this permit shall alter or affect the authority of U.S. EPA to obtain information pursuant to Federal Statute 42 USC 7414, Inspections, monitoring, and entry [401 KAR 52:020, Section 11(3)(d)].
- 14. Nothing in this permit shall alter or affect the authority of U.S. EPA to impose emergency orders pursuant to Federal Statute 42 USC 7603, Emergency orders [401 KAR 52:020, Section 11(3)(a)].
- 15. This permit consolidates the authority of any previously issued PSD, NSR, or Synthetic Minor source preconstruction permit terms and conditions for various emission units and incorporates all requirements of those existing permits into one single permit for this source.

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SECTION G - GENERAL PROVISIONS (CONTINUED)

16. Pursuant to 401 KAR 52:020, Section 11, a permit shield shall not protect the owner or operator from enforcement actions for violating an applicable requirement prior to or at the time of issuance. Compliance with the conditions of a permit shall be considered compliance with:

- a. Applicable requirements that are included and specifically identified in the permit and
- b. Non-applicable requirements expressly identified in this permit.
- 17. Pursuant to 401 KAR 50:045, Section 2, a source required to conduct a performance test shall submit a completed Compliance Test Protocol form, DEP form 6028, or a test protocol a source has developed for submission to other regulatory agencies, in a format approved by the cabinet, to the Division's Frankfort Central Office a minimum of sixty (60) days prior to the scheduled test date. Pursuant to 401 KAR 50:045, Section 7, the Division shall be notified of the actual test date at least Thirty (30) days prior to the test.

(b) <u>Permit Expiration and Reapplication Requirements</u>

- 1. This permit shall remain in effect for a fixed term of five (5) years following the original date of issue. Permit expiration shall terminate the source's right to operate unless a timely and complete renewal application has been submitted to the Division at least six months prior to the expiration date of the permit. Upon a timely and complete submittal, the authorization to operate within the terms and conditions of this permit, including any permit shield, shall remain in effect beyond the expiration date, until the renewal permit is issued or denied by the Division [401 KAR 52:020, Section 12].
- 2. The authority to operate granted shall cease to apply if the source fails to submit additional information requested by the Division after the completeness determination has been made on any application, by whatever deadline the Division sets [401 KAR 52:020 Section 8(2)].

(c) <u>Permit Revisions</u>

- 1. A minor permit revision procedure may be used for permit revisions involving the use of economic incentive, marketable permit, emission trading, and other similar approaches, to the extent that these minor permit revision procedures are explicitly provided for in the SIP or in applicable requirements and meet the relevant requirements of 401 KAR 52:020, Section 14(2).
- 2. This permit is not transferable by the permittee. Future owners and operators shall obtain a new permit from the Division for Air Quality. The new permit may be processed as an administrative amendment if no other change in this permit is necessary, and provided that a written agreement containing a specific date for transfer of permit responsibility coverage and liability between the current and new permittee has been submitted to the permitting authority within ten (10) days following the transfer.

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SECTION G - GENERAL PROVISIONS (CONTINUED)

(d) <u>Construction, Start-Up, and Initial Compliance Demonstration Requirements</u>

Pursuant to a duly submitted application the Kentucky Division for Air Quality hereby authorizes the construction of the equipment described herein, emission points FC3, FU2, PS5, PB8, PB9, PB10, MB4, MB5, MB6, and MB7 in accordance with the terms and conditions of this permit.

- 1. Construction of any process and/or air pollution control equipment authorized by this permit shall be conducted and completed only in compliance with the conditions of this permit.
- 2. Within thirty (30) days following commencement of construction and within fifteen (15) days following start-up and attainment of the maximum production rate specified in the permit application, or within fifteen (15) days following the issuance date of this permit, whichever is later, the permittee shall furnish to the Regional Office listed on the front of this permit in writing, with a copy to the Division's Frankfort Central Office, notification of the following:
 - a. The date when construction commenced.
 - b. The date of start-up of the affected facilities listed in this permit.
 - c. The date when the maximum production rate specified in the permit application was achieved.
- 3. Pursuant to 401 KAR 52:020, Section 3(2), unless construction is commenced within eighteen (18) months after the permit is issued, or begins but is discontinued for a period of eighteen (18) months or is not completed within a reasonable timeframe then the construction and operating authority granted by this permit for those affected facilities for which construction was not completed shall immediately become invalid. Upon written request, the Cabinet may extend these time periods if the source shows good cause.
- 4. For those affected facilities for which construction is authorized by this permit, a source shall be allowed to construct with the proposed permit. Operational or final permit approval is not granted by this permit until compliance with the applicable standards specified herein has been demonstrated pursuant to 401 KAR 50:055. If compliance is not demonstrated within the prescribed timeframe provided in 401 KAR 50:055, the source shall operate thereafter only for the purpose of demonstrating compliance, unless otherwise authorized by Section I of this permit or order of the Cabinet.
- 5. This permit shall allow time for the initial start-up, operation, and compliance demonstration of the affected facilities listed herein. However, within sixty (60) days after achieving the maximum production rate at which the affected facilities will be operated but not later than 180 days after initial start-up of such facilities, the permittee shall conduct a performance demonstration (test) on the affected facilities in accordance with 401 KAR 50:055, General compliance requirements. These performance tests must also be conducted in accordance with General Provisions G(d)7 of this permit and the permittee must furnish to the Division for Air Quality's Frankfort Central Office a written report of the results of such performance test

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SECTION G - GENERAL PROVISIONS (CONTINUED)

6. Terms and conditions in this permit established pursuant to the construction authority of 401 KAR 51:017 or 401 KAR 51:052 shall not expire.

7. Pursuant to 401 KAR 50:045 Section 5 in order to demonstrate that a source is capable of complying with a standard at all times, a performance test shall be conducted under normal conditions that are representative of the source's operations and create the highest rate of emissions. If [When] the maximum production rate represents a source's highest emissions rate and a performance test is conducted at less than the maximum production rate, a source shall be limited to a production rate of no greater than 110 percent of the average production rate during the performance tests. If and when the facility is capable of operation at the rate specified in the application, the source may retest to demonstrate compliance at the new production rate. The Division for Air Quality may waive these requirement on a case-by-case basis if the source demonstrates to the Division's satisfaction that the source is in compliance with all applicable requirements.

(e) <u>Acid Rain Program Requirements</u>

If an applicable requirement of Federal Statute 42 USC 7401 through 7671q (the Clean Air Act) is more stringent than an applicable requirement promulgated pursuant to Federal Statute 42 USC 7651 through 7651o (Title IV of the Act), both provisions shall apply, and both shall be state and federally enforceable.

(f) <u>Emergency Provisions</u>

- 1. Pursuant to 401 KAR 52:020 Section 24(1), an emergency shall constitute an affirmative defense to an action brought for the noncompliance with the technology-based emission limitations if the permittee demonstrates through properly signed contemporaneous operating logs or relevant evidence that:
 - a. An emergency occurred and the permittee can identify the cause of the emergency;
 - b. The permitted facility was at the time being properly operated;
 - c. During an emergency, the permittee took all reasonable steps to minimize levels of emissions that exceeded the emissions standards or other requirements in the permit; and
 - d. Pursuant to 401 KAR 52:020, 401 KAR 50:055, and KRS 224.01-400, the permittee notified the Division as promptly as possible and submitted written notice of the emergency to the Division when emission limitations were exceeded due to an emergency. The notice shall include a description of the emergency, steps taken to mitigate emissions, and corrective actions taken.
 - e. This requirement does not relieve the source of other local, state or federal notification requirements.
- 2. Emergency conditions listed in General Condition (f)1 above are in addition to any emergency or upset provision(s) contained in an applicable requirement [401 KAR 52:020, Section 24(3)].

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SECTION G - GENERAL PROVISIONS (CONTINUED)

3. In an enforcement proceeding, the permittee seeking to establish the occurrence of an emergency shall have the burden of proof [401 KAR 52:020, Section 24(2)].

(g) <u>Risk Management Provisions</u>

1. The permittee shall comply with all applicable requirements of 401 KAR Chapter 68, Chemical Accident Prevention, which incorporates by reference 40 CFR Part 68, Risk Management Plan provisions. If required, the permittee shall comply with the Risk Management Program and submit a Risk Management Plan to:

RMP Reporting Center P.O. Box 1515 Lanham-Seabrook, MD 20703-1515.

2. If requested, submit additional relevant information to the Division or the U.S. EPA.

(h) Ozone depleting substances

- 1. The permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 CFR 82, Subpart F, except as provided for Motor Vehicle Air Conditioners (MVACs) in Subpart B:
 - a. Persons opening appliances for maintenance, service, repair, or disposal shall comply with the required practices contained in 40 CFR 82.156.
 - b. Equipment used during the maintenance, service, repair, or disposal of appliances shall comply with the standards for recycling and recovery equipment contained in 40 CFR 82.158.
 - c. Persons performing maintenance, service, repair, or disposal of appliances shall be certified by an approved technician certification program pursuant to 40 CFR 82.161.
 - d. Persons disposing of small appliances, MVACs, and MVAC-like appliances (as defined at 40 CFR 82.152) shall comply with the recordkeeping requirements pursuant to 40 CFR 82.166.
 - e. Persons owning commercial or industrial process refrigeration equipment shall comply with the leak repair requirements pursuant to 40 CFR 82.156.
 - f. Owners/operators of appliances normally containing 50 or more pounds of refrigerant shall keep records of refrigerant purchased and added to such appliances pursuant to 40 CFR 82.166.
- 2. If the permittee performs service on motor (fleet) vehicle air conditioners containing ozone-depleting substances, the source shall comply with all applicable requirements as specified in 40 CFR 82, Subpart B, Servicing of Motor Vehicle Air Conditioners.

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SECTION H - ALTERNATE OPERATING SCENARIOS

See Section B of this permit.

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SECTION I - COMPLIANCE SCHEDULE

None.